

## **Appendix B**

### **SUPPRESSOR SOFTWARE CHANGES FOR VERSION 5.3**

TABLE B-1. Suppressor Software Change Releases.

Release No.	Description	Files Affected	Date
5.3-01	This change prevents writing error message 20, Name From Incorrect UAN Category, after the phrase NOW-USE INTERCEPT-MODE in a MOVE-PLAN. The code was erroneously looking for a user assigned name from MANEUVERS, but only the keywords PURSUIT or PREDICTED are allowed.	KNDPLN	8-SEP-1994
5.3-02	This change affects only the scoreboard which appears during the SUPPRESSOR MOD step. UNIX users were seeing the deletion of the first character of some of the output labels during the run. This change solves the problem by shifting those labels and their corresponding data columns one position to the right.	OUTDSP	21-SEP-1994
5.3-03	This change adds a new output incident, REACHES-CHECKPOINT, to indicate when a mover has reached a labeled checkpoint, as identified in the SDB.	BOOT.DAT FLTDEL MAYBOR OUTXL8 RUNEXE	22-SEP-1994
5.3-04	This change places the subordinates of the new commander on the appropriate communication net(s) and places the new commander on the net(s) of the subordinates. In addition, this change prevents duplicate entries from occurring on the communication nets.	ALTCMD XL8NCS	17-OCT-1994
5.3-05	This change prevents a possible crash by initializing the pointer to the receiver block. It also prevents bad information from being used in the system status by initializing one of the variables.	YAKKER	19-OCT-1994
5.3-06	This change ensures that the perception of a friendly player is deleted when a player sees the death of a friend. Without this change the perception is deleted only if the dead player is a subordinate.	DIEFRI	31-OCT-1994
5.3-07	This change causes the communications net data structures to be properly removed when a communications system is destroyed. The old code only looked for one net. This change loops for all nets that included the destroyed system.	INJCOM	31-OCT-1994
5.3-08	This change fixes the scheduling of REACHES-CHECKPOINT events. In some cases, this event was being incorrectly scheduled to occur at a game time prior to the current game time.	RUNEXE	15-NOV-1994
5.3-09	This change creates a cross-reference listing of SUPPRESSOR Code Numbers and User Application Names (UAN). This new listing can be found at the end of text output files which contain UAN processing.  The reason for this change is to facilitate scenario debugging, in that users can now just search for a particular player, sensor receiver, etc. code in the listing instead of having to physically count UAN names. For example, if during a debug run the SUPPRESSOR code 760142 was encountered, the user would have had to count UAN player names to determine the name of the 142nd player. Now he can simply "grep" or "search" for the string "760142" in the UAN listing to determine the name.	SEMANT	18-NOV-1994

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-10	This change prevents model crashes which can be caused by missing pointers when using uncontrolled weapon types.	AILHIT DELFYR	18-NOV-1994
5.3-11	This change adds a new RESOURCE-ALLOCATION criterion, SUBORDINATE-JAMMED-FOR. This criterion can be used to make tactical decisions when subordinate players have jammed radar receivers.	BOOT.DAT DBGCRT EVALU8	18-NOV-1994
5.3-12	This change expands the output written with the NOW-SENSING-ELEMENTS-OF-TGT and CHANGE-IN-DETECTION-FOR incidents. The azimuth and elevation angles used to determine the target signature from the corresponding susceptibility table are printed with these incidents, when this change is implemented. The modifications to the boot file for this change are described as part of change 5.3-11.	OBSCHA OUTXL8 SILUET	21-NOV-1994
5.3-13	This change prevents a condition which can cause the model to crash. This change ensures that a dead subordinate player is dropped from all lethal assignment queues. Without this change, a dead subordinate was dropped from the assignment queues only if the subordinate was also assigned to the target.	DIEFRI SASIN8 SEEFUZ	21-NOV-1994
5.3-14	This change expands the RESOURCE-ALLOCATION criterion PERCEPTION by adding an optional reference expression, COMMO-TYPE. The COMMO-TYPE expression can be used to test the type of communications receiver used to receive intelligence on a target.	DBGOUT CMDFUZ EVALU8 SEEMSG UPDATE	21-NOV-1994
5.3-15	This change expands the capability of RELATIVE zones. It allows these zones to be defined relative to a named checkpoint in a PATH or PLANS-FOR-MOVEMENT, an arbitrary point in the SUPPRESSOR coordinate system, or the current position of a friendly or target player location. Also, the vertical limits of the zone can now be defined to be relative to the reference point, in addition to the traditional AGL or MSL.	BEGONE BOOT.DAT EVALU8 INTRPT RUNVAL UPDATE VARORD VOLUME XL8PLY XL8SDP	6-DEC-1994
5.3-16	This change improves the utility of the J/N-NOISE-OPERATOR-THRESHOLD and J/N-PULSE-OPERATOR-THRESHOLD entries in the DETECTION-SENSITIVITIES data item. After implementing this change, the "is-jammed" flag is set for a radar sensor whenever the threshold is exceeded. Before this change, the "is-jammed" flag was set only when the threshold was exceeded and the jamming signal was strong enough to prevent sensing the target.	OBSRDR	6-DEC-1994
5.3-17	This change increases the size of the trash list, an data structure used in Suppressor. Some scenarios were aborting with MODEL MESSAGE 3, Array Too Small, and this change prevents this problem.	BOOT.DAT	6-DEC-1994

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-18	This change enhances Suppressor so disaggregated weapons can be fired at target perceptions. These perceived targets may have already been killed by another player or may be inaccurate in their perceived locations. This change allow users to simulate weapons fired at targets with locations derived from other intelligence sources.	WPNFYR XL8ROD XL8SDP	29-DEC-1994
5.3-19	This change extends the RESOURCE-ALLOCATION criterion, SYSTEM-STATUS for use in all procedures. In particular, this change allows a commander to make assignment or guns-free/tight decisions based on the status of tracking sensors belonging to the subordinate player.	EVALU8	29-DEC-1994
5.3-20	This change removes a feature in Suppressor which is now handled better using emission control. Before this change if a player became autonomous or had acquisition sensors killed, it would try to maintain some acquisition ability by finding another sensor and turning it on, even if the other sensor was designated as only a tracker. This change removes the hard coded turning on of a tracker, because it was causing too many emitters to be used when another player was providing adequate acquisition.	ARROG8 SEEFUZ	29-DEC-1994
5.3-21	This change prevents a potential model crash when using optical sensors. When certain optical sensor input tables are omitted or contain values near zero, Subroutine OBSOPT could compute a radiance value near zero. This change detects this case and replaces the contrast computation with the largest value from the input tables, preventing the divide by zero.	OBSOPT	13-JAN-1995
5.3-22	This change replaces an incorrect comment in the preamble. The old comment referred to the wrong data block.	ERGGAR	17-JAN-1995
5.3-23	This change prevents a potential crash during the MOD step. If a commander is evaluating the FIRED-BEFORE RESOURCE-ALLOCATION criterion in one of the lethal assignment procedures, and the subordinate has recently been killed, the code could crash with an access violation. After the commander recognizes the death of the subordinate it is removed from the list of subordinates and this is no longer a problem.	EVALU8	9-FEB-1995
5.3-24	This change adjusts the radar calibration code used when the ONE-M2-DETECT-RNG data item is specified for a radar receiver. If the DETECTION-SENSITIVITIES data item for the receiver includes the entry, OPERATING-LOSSES, that value was being ignored during calibration. With this change OPERATING-LOSSES is considered during the calibration step.	PRGRSS	22-FEB-1995

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-25	This change adds AZIMUTH-SLEW-LIMITS and dynamic location cuing features to Suppressor. This feature can be used to better simulate sensors with limited slewing which are cued toward targets by their operators. The AZIMUTH-SLEW-LIMITS is an optional TDB data item usable with sensor receiver or transmitter systems. The dynamic cuing influences both the slew limits and zones with angles relative to the heading of a location.	BOOT.DAT CMDFUZ CUELOC EFEEND EFEMIT EFESUB LIMIN8 OUTXL8 PRGRSS SILUET VARLOC	24-FEB-1995
5.3-26	This change makes a correction in pointing emitters seen by warning receiver (RWR) sensors. If the emitter is a radar tracking the player location carrying the RWR, this change consistently points the radar emitter directly at the RWR. Before this change, the radar emitter pointing was left unchanged.	OBSPTE	4-APR-1995
5.3-27	This change prevents the act of turning off a sensor from stopping all engagements which involved this sensor. When the same tracker was being used in multiple engagements and the tracker was not scheduled to be turned on until the weapon firing, the old code would complete the first engagement and remove the sensor from all engagements. This prevented the sensor's use in the later engagements.	EMITTR	13-APR-1995
5.3-28	This change allows terrain following movers to use MAXIMUM acceleration, as specified in the TDB data item ACCELERATION-MODE. The other option, UNIFORM acceleration, may still be used. Before this change, most terrain following points were created assuming the mover was using UNIFORM acceleration.	MVCKPT	13-APR-1995
5.3-29	This change is a correction which allows SNR-ANGULAR-LIMITS to be used with sensors which are pointed using the SDB phrase "POINT IT AT LOCATION." This correction computes the proper unit heading vectors and stores them in the Antenna Pointing block (201), which is the reference for angular limits when the user has included a POINT IT phrase.	PRIOVA SILUET VECPTE	24-APR-1995
5.3-30	This change is a correction which allows CONTROLLED weapons to be aborted after their trackers lose lockon and coast for longer than their MAX-COAST-TIME. Without this change, tracking sensors can lose lockon and coast, but the weapon abort events are never scheduled.	OBSLOK	4-MAY-1995
5.3-31	This change adds a new data structure, the cuing history list, which maintains a list of dynamic location cuing changes during a run. The change ensures the post-processing output and graphical display software include correct heading angles for cued locations.	BOOT.DAT CMDFUZ CUELOC DYNLOC	22-MAY-1995

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-32	This change makes a correction in computing path interval times. These times are used to compute maximum and minimum climb and dive altitudes. The correction is to compute the path distance in 3 dimensions instead of 2. If a mover is in a steep climb or dive, the 2-D computation was resulting in a short time to achieve the desired climb or dive causing Model Message 45, Cannot Reach Desired Altitude. With this correction, a more accurate time to move the 3-D distance is computed and used to determine the climb and dive limits.	MVCKPT MVFOLO	23-MAY-1995
5.3-33	This change enhances the utility of three MOVE-PLAN conditions, MY-ALT, MY-HDG, and MY-SPD. This change allows these conditions to be used without a target perception. Before this change, a target perception was required to use these conditions.	RUNVAL	31-MAY-1995
5.3-34	This change improves the reactive movement in Suppressor by ensuring a suspended terrain following mover can resume movement at the desired terrain following altitude. Before this change the mover would frequently crash after resuming movement.	RUNEXE	31-MAY-1995
5.3-35	This change allows the specification of multiple assignment command chains in a player's ASG-CMD-CHAIN tactic data item. This will prevent a subordinate from decentralizing control until his commander in each of the specified ASG-CMD-CHAIN's is dead. Similarly, when the COMM-LOSS-DECENT-TIME item is used, the subordinate will not decentralize control until he has broken communication with each ASG-CMD-CHAIN commander for the specified length of time.	ALTCMD ARROG8 BOOT.DAT COMFUZ EVALU8 KNOTBL SEEFUZ VARORD XL8ROD YAKKER	05-JUN-1995
5.3-36	This change allows for the use of peer communication in message and sensor reporting guidelines. Both the MSG-RPT-GUIDE and the SNR-RPT-GUIDE now accept PEER as a valid relationship input value. Peers may have perceptions of other peers without having a thinking system. Only those players with thinkers should notice a death result.	AILRIP BOOT.DAT INTRPT PRRIRS PRRSRT SEEFUZ XL8SPE	7-JUN-1995
5.3-37	This change adds two new Resource Allocation criteria, RESOURCE-PITCH-ANGLE and RESOURCE-ROLL-ANGLE.	BOOT.DAT DBGCR EVALU8	8-JUN-1995
5.3-38	This change prevents some crashes for terrain following movers. When a mover executes the MOVE-PLAN actions GOTO POSITION TGT and EXECUTE SUSPEND MOVEMENT, the computation of the suspend movement point was ignoring terrain. This change checks the terrain and ensures the suspend point is above the terrain.	RUNEXE	9-JUN-1995

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-39	This change is a refinement in the computation of the suspend movement point for a mover after executing the MOVE-PLANS action EXECUTE SUSPEND MOVEMENT. This change ensures the suspend point allows adequate time to decelerate to zero speed. Before this change, there were cases with terrain following movers when it was unable to decelerate completely to zero speed, causing MODEL MESSAGE 102 (ADVISORY): Cannot Reach Desired Speed.	RUNEXE	16-JUN-1995
5.3-40	This change corrects a problem for movers which repeatedly suspend and resume movement. Before this change, there were cases when a mover would ignore the MOVE-PLAN action EXECUTE SUSPEND MOVEMENT after it had resumed movement following a previous SUSPEND. This change clears a pending suspend movement flag to correct this problem.	RUNEXE	27-JUN-1995
5.3-41	This change prevents a possible square root of a negative number when a very slow mover is using MAXIMUM ACCELERATION-MODE and suspending movement. This change detects the negative values and substitutes the deceleration speed for the next path point.	MVCKPT	27-JUN-1995
5.3-42	This change prevents a model crash in the recognize communications event, when the event happens after the player's communications equipment has been killed. The correction adds a search for scheduled recognize communications events to the code which removes killed communications equipment, and stores a zero in the net pointer.	INJCOM SEEMSG	13-JUL-1995
5.3-43	This change adds an RE: phrase to the SENSOR-STATUS RESOURCE-ALLOCATION criterion, and extends its utility to all procedures. This allows SENSOR-STATUS to be used in engagement decisions involving multiple trackers.	BOOT.DAT EVALU8 GRAPAR KNDDBS KNDLOG	11-AUG-1995
5.3-44	This change adds a new output incident, SELF-DESTRUCTS, to indicate when the shooter location is destroyed due to an intercept by its ordnance.  Formerly, only a self-destruction due to an aborted flyout was reported (SELFDESTRUCTS-IN-FAILURE).  Also, this change removes the requirement that a weapon be defined as CONTROLLED in order to make the SELF-DESTRUCTION mechanism work.	BOOT.DAT WPNHIT	11-AUG-1995
5.3-45	This change fixes a problem with the REACHES-CHECKPOINT incident, when running on certain computers (HP, in particular). The variable LSUPPL was used before its value was defined. This wasn't a problem on DEC and SUN machines, where local variables retain their values between subroutine invocations. However, on HP local variables have no defined value when the subroutine is started, which conforms with the ANSI FORTRAN 77 standard.	NAYBOR	11-AUG-1995

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-46	This change prevents possible model crashes involving scenarios with disaggregated players in two or more command chains. This additional code determines if a subordinate is already on a commander's list of subordinates, before adding itself as a subordinate.	XL8SPE	24-AUG-1995
5.3-47	This change improves the modeling of an implicit weapon flyout. When a weapon is fired at a moving target, the WPN-SPD-CAPABILITY of the weapon, and the planned flight path of the target are used to compute a time for the weapon intercept event. If the weapon cannot intercept the target, the incident, CANNOT-INTERCEPT, is written and a weapon abort event is scheduled after the maximum weapon time of flight. With this change, any target maneuver causes pending abort as well as intercept events to be evaluated again and new intercept (EXPECTS-TO-INTERCEPT) or abort (CANNOT-INTERCEPT) events to be scheduled.	AILHIT AILMOV BOOT.DAT OUTXL8	31-AUG-1995
5.3-48	This change prevents a possible model crash by adding code to ensure the model will not attempt to compute the square root of a negative number. If a sensor or target location is computed as being slightly below the terrain, the change detects this and causes the sensor chance to end with a terrain masked status.	LOSCHK	8-SEP-1995
5.3-49	This change removes a data structure that is not used in the Suppressor model, and cleans up some source code. The removed data structure is the assignments buffer which utilized a (90) data block.	BEGONE BOOD.DAT DELPER DIEFRI DIESUB EFESUB SASIN8 SEEFUZ WPNFYR	9-OCT-1995
5.3-50	This change improves the portability of Suppressor by defining some variables that were previously undefined.	BOOTIP DYNLOC VARMAT	12-OCT-1995
5.3-51	This change corrects two deficiencies. First, it improves the test for a radar being in track mode. Second, it adds code to ensure that the emitter pointing is within the new AZIMUTH-SLEW-LIMITS as well as any other current limits, if they are specified.	OBSPTTE	12-OCT-1995

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-52	This change implements the ability to define and change signature configuration states of element susceptibilities depending on dynamic conditions during model execution.	BOOT.DAT CONFIG EFFENG EFEJAM EFEMIT KNDDBS KNDLOG KNDPLN KNDSTR OUTDSP OUTXL8 SUNEXE SEMANT SIARIA VARLOC XL8CTS XL8GDS	27-OCT-1995
5.3-53	This change prevents potential model crashes by removing the references to the tracker entry block (45) if the sensor is destroyed. In particular any references to the block from pending initiate track events (263000) are cleared.	DELSWT INITRK INJSNR	8-NOV-1995
5.3-54	This enhancement adds two new weapon tables, INTERCEPT-ENVELOPE and LAUNCH-ENVELOPE. Whether or not a target is within the geographical region defined by the table can be used as a criterion of whether to fire at it. Two new RESOURCE-ALLOCATION criteria, IN-INTERCEPT-ENVELOPE and IN-LAUNCH-ENVELOPE make this determination.	BOOT.DAT DBGCRT EFEENG ENVLOP EVALU8 PRGRWS	20-NOV-1995
5.3-55	This change adds a reference phrase to the ACTIVE-ATTACK-PRIORITY criterion in RESOURCE-ALLOCATION. When evaluating one of the assignment procedures, a commander may now check his own attack priority or the attack priority of the subordinate.	BOOT.DAT DBGCRT DBGOUT EVALU8	28-NOV-1995
5.3-56	This change adds a new criterion, CLOSER-TARGETS, to RESOURCE-ALLOCATION. CLOSER-TARGETS counts the number of targets of particular types on the player's perception list that are closer than the current target. The reference location can be either the location of the player evaluating the procedure, or the location of the resource. The term closer is computed using the 3-dimensional distance between the reference location and the target.	BOOT.DAT DBGCRT EVALU8 KNDLOG	5-DEC-1995
5.3-57	This change improves the utility of the dynamic location cuing feature. With this change, a commander now updates the perceived heading of any subordinate players after he has sent a SUB-CUING message to the subordinate. Before this change, the subordinate would change its heading, but the commander's perception of the subordinate remained at the old heading.	CMDFUZ	5-DEC-1995

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-58	This change implements a new map projection algorithm, called Transverse Mercator. This algorithm is very accurate within 15 degrees either side of the Center of Scenario. Transverse Mercator is now the default projection. If you wish to continue using the older Orthographic projection to keep scenario results consistent, you must add the new MAP PROJECTION data item in the SDB header information.	BOOT.DAT CHGC2S CHGS2C VARINI	7-DEC-1995
5.3-59	This change improves the precision in the new Transverse Mercator projection used in Suppressor. This change computes a radius for the earth model based on the latitude of the center of scenario, and the WGS-84 ellipsoid.	BOOT.DAT CHGC2S CHGS2C VARINI	22-FEB-1996
5.3-60	This change corrects a variable definition in the preamble of this subroutine. The argument, PWROUT, was erroneously defined as the power seen by the warning receiver. Since this value is not attenuated, the correct definition is power transmitted by the target.	OBSLSN	22-FEB-1996
5.3-61	This change is an enhancement to change 5.3-36. It causes the data structures for perceptions of peer players to be built only for players who own communications equipment and have one of the peer options enabled in their MSG-RPT-GUIDE or SNR-RPT-GUIDE data items. This prevents the required size of the JNR array from becoming too large. This was a significant problem in scenarios with large numbers of subordinate players.	XL8PLY XL8SPE	17-APR-1996
5.3-62	This change corrects a problem associated with use of the SDB "TOLD ABOUT" phrases. Every player with "TOLD ABOUT" phrases has target perceptions created corresponding to the players listed in the "TOLD ABOUT" phrases. Before this change the order of the PLAYER: phrases in the SDB influenced the content of the perception data. If the threat mentioned in the "TOLD ABOUT" phrase was later in the SDB, then the perception included a complete description of the perceived player and its elements. If the threat mentioned in the "TOLD ABOUT" phrase preceded the phrase, then only a dummy element was associated with the perception. This dummy element could cause problems when using tactics that depend on element information such as ATK-PRIORITIES used with MOVE-PLANS. This change ensures every "TOLD ABOUT" threat perception always contains complete element information, regardless of the player order in the SDB.	SIMUL8	17-APR-1996
5.3-63	This change adds several more computer generated antenna patterns which may be accessed using the ANTGR-PATTERN TDB data item. The new patterns are generated from Vertical Coverage Diagrams provided by NAIC, through Calspan.	ANTGR ERGGAR	3-MAY-1996
5.3-64	This change extends the utility of the IN-INTERCEPT-ENVELOPE criterion. If the target has multiple locations and some of the locations have been killed, it was possible to cause a model crash by testing the criterion against a perceived location that was recently killed. This correction prevents the model crash.	ENVLOP	7-JUN-1996

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-65	This change adds a new WPN-PK dimension, WPN-FLIGHT-TIME, and expands the utility of the REL-TGT-HDG dimension. The new dimension, WPN-FLIGHT-TIME, may be used to define $P_k$ s dependent on the total time of flight for the player with the weapon. It is intended for use with self-destructing missile players. The REL-TGT-HDG dimension after this change may be used to define non-symmetric $P_k$ data on the left and right sides of the target by using REL-TGT-HDG values from -180. to +180. degrees. The original meaning of REL-TGT-HDG can be maintained by using values from 0. to +180. degrees.	BOOT.DAT WPNGEO WPNTGT	7-JUN-1996
5.3-66	This change improves the consistency in the use of the internal jamming effectiveness flag, and the pointing of sensors when being detected by warning receivers. This change sets the flag which indicates the presence of jamming when adequate noise is present; before this change the jamming presence flag required that the jammer have enough power to deny information at the sensor. This change also modifies the sensor pointing logic to point a sensor at the warning receiver only if the player owning the warning receiver is a current target of the sensor; before the ACQ-WHILE-TRACK flag would also allow the sensor to be pointed directly at the warning receiver.	OBSPT OBSRDR	7-JUN-1996
5.3-67	This change prevents potential crashes of the model when multiple location players have some locations omitted in the SDB. Omitting SDB locations is frequently used so one player-structure may be utilized for several variations of a player type. This change prevents potential problems when some systems are linked to other systems in the omitted location, by adding code to ignore linkages when one of the systems belongs in an omitted location.	PRRNLS	13-JUN-1996
5.3-68	This change adds two new RESOURCE-ALLOCATION criteria and two new MOVE-PLANS conditions to facilitate improved air-to-air engagement logic. The new RESOURCE-ALLOCATION criteria are TGT-INTERCEPT-LOC and RESOURCE-LOC. The new MOVE-PLANS conditions are TGT-INTERCEPT-LOC and MY-LOC. These conditions allow the intercept point or the current mover position to be tested relative to a zone. This change allows actions like breaking off an engagement when the target enters a sam engagement zone, or preventing missile firing until it has flown out of a safe-arming zone.	BOOT.DAT DBGCRT DBGOUT EVLAU8 RUNVAL	21-JUN-1996
5.3-69	This change ensures all user defined path points are kept in the mover's path. Before this change, some user defined points were dropped if the turn radius was too large to reach the point. With this change the user defined points are kept, and an advisory message is written showing the original and the smaller adjusted turn radius.	BOOT.DAT DYNPTH DYNVEC MVBEST MVFOLO	15-JUL-1996

TABLE B-1. Suppressor Software Change Releases. (Contd.)

Release No.	Description	Files Affected	Date
5.3-70	This change is a correction to ensure that the USING phrases which may follow NOW-USE PATTERN actions in MOVE-PLANS are consistently implemented. Before this change, if the moving player executed two or more NOW-USE PATTERN actions in close succession, it was possible that the USING phrase would be ignored. This change corrects the problem.	RUNEXE RUNORB	10-SEP-1996
5.3-71	This change is an addition so that the output incidents, ,IN-ENVELOPE,- INTERCEPTS and ,NOT-IN-ENVELOPE,- INTERCEPTS always include the identification number and name of the shooter's weapon system. Before this change, if the shooter was dead at the time of the intercept event, the weapon number and name were omitted. This change allows more consistent post-processing by ensuring the weapon information is always present.	BOOT.DAT OUTXL8 TRKFYR WPNHIT	3-OCT-1996